

## MUSIC RESEARCH / RECENT ARTICLES

## Iron Age jingling



A replica of an 11th-century pellet bell discovered at the Vanhakartano cemetery in Köyliö.

BY Riitta Rainio

Archaeological excavations in Finland have uncovered a large number of bells, pellet bells and other objects created for producing sound. These findings offer us a new, fascinating sonic window into the so far unknown soundscape of the Iron Age and complement the writing of history of more recent eras.

Books written about Finnish music history usually begin in the Middle Ages with the arrival of Christianity and Christian sacred music, Latin-language plainsong in particular, in Finland in the 13th and 14th centuries. The religious establishments set up in the town of Turku and its surroundings produced sheet music leaflets, music books, excerpts from the Mass and other literary sources, which have helped music researchers form their view about the course of history.

The earlier, pre-Christian centuries have been largely left unstudied due to the lack of literary sources, and may thus give the impression of being a silent, mute or 'music-less' era.

This impression, however, is slowly beginning to fade due to closer examination of the material traces that have long been preserved underground and have now been excavated. Finnish archaeological findings include a wealth of small metal bells and pellet bells, ball-like and cone-shaped objects that resemble some sort of rattles. The whole or fragmented clappers and loose

## LATEST FMQ ISSUE



## LIKE US ON FACEBOOK



Tykkää sivusta

Jaa

Ole kavereistasi ensimmäinen, joka tykkää tästä.



## RECENT POSTS



Beyond genre

Oct 7, 2016



Collective resonance

Oct 7, 2016

Aural landscapes, sonic mindscapes – Editorial from FMQ Autumn/2016

Oct 7, 2016



The voice of freedom

Oct 7, 2016



Spaces and pigeonholes

Oct 7, 2016

pellets found inside these objects prove that they were indeed used for producing sound. Bell pendants without clappers have been found in series of several items, and apparently produced their sound by clinking against each other.

Although these instruments are often brittle and broken, and may seem more like playthings than instruments to us, they do open a unique and tangible sonic window into the soundscape of the younger Iron Age in Finland and into the lesser-known early stages of music history.

## Many types of bells

So far, some 500 bells, pellet bells and bell pendants have been collected, but the amount keeps steadily increasing with new findings virtually every year. The finding locations cover the most important settlement hubs in the areas of Finland Proper, Satakunta, Tavastia, Savonia and Karelia during the younger Iron Age in Finland, from the 5th to the 13th century. It thus appears that these objects were fairly established and commonly used in their time, producing sounds that formed an essential part of the soundscape of the era.

The diverse manufacturing methods and materials as well as the variety of design and ornament types reveal the longevity and popularity of these types of objects. These artefacts were most often cast in a mixture of copper, tin and lead or, less frequently, made by bending iron or copper sheet into shape. Large and heavy pellet bells were particularly common in Western Finland, whereas groups of small, jingling bell pendants were popular in Eastern Finland.

There are certain types of pellet bells and bell pendants that seem to have been imported to Finland from far away, judging from the discovery of matching artefacts in Russia and the Baltic area. On the other hand, the artisans who made these objects would often cover notably large distances in their travels and produce their craft at different locations. In any case, it would seem that the method of manufacturing and of using these kinds of instruments was international.

## High-pitched jingling

Of the bells, pellet bells and bell pendants that have been discovered, 26% still produce a sound. Even though the brittle and corroded walls often render their sound weak and toneless, there are some specimens whose sound appears to have remained nearly intact.

When playing these objects, the impact from pellets, clappers or adjacent rims of the bells produces a bubbly jingling, vibrating at 1,000–20,000 hertz in pellet bells, at 2,000–20,000 hertz in bells, and at 5,000–20,000 hertz in bell pendants. The pitch is thus very high and contains a wealth of different partial tones.

Compared to the horse collar bells, sleigh bells or cow bells used during more recent centuries, the sound from the Iron Age instruments is short in duration, producing such a complex harmonic spectrum that it is usually impossible to detect a certain pitch. Irregularities in the walls of the instruments mean that the bells produce sharp, close doublets as well as beats. Depending on their size, shape and building material, different pellet bells seem to have produced a whole range of distinct sounds.

## Stories from the grave

By examining the find context of these bells, pellet bells and bell pendants – in other words, additional objects and traces discovered in the vicinity – we gain information about the use, function, meaning and value of these millennium-old objects.

Instead of being found in Iron Age dwelling places, these instruments are most commonly discovered in graves and burial grounds, in the midst of burial costumes and other artefacts the dead were buried with. The instruments are attached to the head ornaments, strings of pearls, brooch chains, belts, coats or side cloths of the deceased, or sometimes attached to purses, bushels or horse equipment.

When comparing these graves to the other graves in the same burial ground, it becomes evident that most of the musical instruments were buried with the wealthy dead: women who had abundant silver and bronze jewellery attached to their dresses, and men who had been laid to rest with weapons and trading tools. Musical instruments are seldom discovered in the more modestly adorned graves. They are often discovered together with pendants bearing motifs of crosses,

## ARCHIVES

2016 2015 2014 2013 2012 2011 2010  
2009 2008 2007 2006 2005 2003 2001  
2000 1999 1998 1997 1996 1995 1994 1992  
1990 1989 1988 1987 1985

## FEEDS



RSS

animals or weapons, and with certain parts of animals or plants that in subsequent Finnish Karelian culture were considered magical and used for making spells.

## Jingling costumes

The bells, pellet bells and bell pendants discovered in the graves were often worn through, which indicates that these burial costume accessories had been in everyday use. When the owner of such a costume moved about, the instruments embedded in the costume created a metallic, jingling sound field around their carrier. A sound field produced by a single instrument would not have been very strong on its own, but bunching together five, ten or even fifteen pellet bells or bell pendants could increase the volume.

The jingling sound surrounding a moving individual may have played a significant role in social interaction by attaching the cultural meanings of the jingling metal to the bearer of the costume, as well as building an acoustic space or territory around them that was easily perceivable to others from far away. Based on various find contexts, the different meanings of this sound were usually associated with an individual's position in society, social differentiation and magic.

In Eastern Finland, bell pendants are so predominantly found in women's graves that their sound may well have been associated with gender. It is feasible that these jingling costumes, similar to the burial costumes, were worn for special occasions such as celebrations or rituals, where the community's shared values and structures were processed and passed on to the people that came together.

## New findings from a historical era

During the younger Iron Age, pellet bells and bell pendants seem to have been more popular than ever. In the 14th century, the Christian way of burying the dead without any accompanying artefacts slowly became the norm and the amount of findings from that era goes down dramatically, with just a handful of these instruments unearthed from medieval churches, towns or estates. Larger bells were still in use, either as cow, sheep or horse bells, or as massive church bells. The meanings attached to the jingling of metal began to change.

Archaeological findings can offer a sonic window into previously unexplored prehistoric times, but this material can equally well be used to complement historical writing of more recent times as well. Over the past few decades, archaeological excavations into the medieval layers of Turku have uncovered instruments that show the city's medieval musical life in a completely new light.

The most surprising finding is undoubtedly the T-shaped drum hammer made out of reindeer antler, which is a near-perfect replica of the shaman drum hammer traditionally used by the Sámi people. This mysterious object bears strong references to shamanistic rituals and was found under the floor of a 15th-century dwelling, giving the impression that it was kept hidden. The finding is even more intriguing given its location, just 150 metres from Turku Cathedral.

*Riitta Rainio is a postdoctoral researcher at the University of Helsinki, Department of Philosophy, History, Culture and Art Studies/Musicology. Her work is funded by the Academy of Finland.*

*Translation: Hanna-Mari Latham*

Tags: FMQ 2/2014, research

*Previous post*  
Homo musicus

*Next post*  
Universal, national or Germanised?

FINNISH MUSIC QUARTERLY

Urho Kekkosen katu 2C  
FI-00100 Helsinki  
fmq(at)fmq.fi

FMQ DETAILS

Finnish Music Quarterly  
ISSN 0782-1069  
4 issues annually

Search

© 2015 FMQ. All Rights Reserved.